



UTERINE LIPOLEIOMYOMA-A CASE REPORT

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Lipoleiomyoma is a rare and specific type of benign uterine neoplasm with an incidence ranging between 0.03%-0.2%. This tumor is considered a benign variant of typical uterine leiomyomas. It is composed of variable proportion of mature adipocytes and smooth muscle cells. We present a case of uterine lipoleiomyoma in a 41-year-old patient.

KEYWORDS :**INTRODUCTION**

Uterine lipoleiomyomas result from degeneration of smooth muscle cells in an ordinary leiomyoma and represent a rare benign tumor of the uterus. Various studies have classified this tumor both as a uterine fatty tumor, subdivided into "lipoma" and "mixed lipoma/leiomyoma" (lipoleiomyoma), or as a manifestation of metaplastic changes in leiomyoma¹. The etiology may be related to estrogen deficiency occurring after the menopausal transition, it usually appears in obese perimenopausal or menopausal women.

The symptoms are nonspecific, and most are diagnosed incidentally. Typically, the symptoms of lipoleiomyoma are similar to those of conventional leiomyomas, which can range from being asymptomatic to causing pelvic pain or vaginal bleeding [2]. While the common site of lipoleiomyoma is the uterine corpus, rare cases have also been reported in the cervix, ovary, broad ligament, and retroperitoneum.

In this report, we report a case of 41-year-old patient presenting with heavy menstrual bleeding.

Case Presentation

A 41 year old female presented to the obstetrics and gynecology department with complaints of heavy menstrual bleeding, pain in abdomen and back pain since 3 month. The menarche was at 14 years of age with menstrual cycles of 5 to 6 days and an interval of 26 days.

On examination the patient was conscious, oriented, alert, and vitally stable. Abdominal examination reveals a firm to hard mobile, non-tender mass of approximately 22 weeks size uterus. The gynecological examination revealed no abnormalities of the vulva, vagina, and cervix. The rest of the physical examination was within normal limits.

Initial laboratory tests reveal raised beta HCG levels, all other laboratory test were within normal limits. Abdominal and pelvic ultrasonography scans reveals a large well defined heterogeneous space occupying lesion measuring approximately 16.3 x 11.7 cm with internal cystic areas is noted arising from fundus and anterior wall of uterus suggestive of uterine fibroid with cystic degeneration. The patient subsequently underwent a total abdominal hysterectomy and a bilateral salpingo-oophorectomy.

During laparotomy, a 16 x 11 centimetres yellowish, soft-

textured fibroid arising from fundus was observed. Total hysterectomy with bilateral oophorosalphingectomy was performed. Transoperative blood loss was minimal, and the surgery was completed without complications.

On gross examination, uterus with cervix was 24x 18x 8 centimeters. there was an intramural fibroid measuring 17.5 cm in diameter originating from fundus was seen. Cut surface of fibroid reveal pale yellow, whorled areas along with yellow soft and greasy areas in between them.

On microscopic examination, variable amount of bland, spindle shaped smooth muscle cells arranged in intersecting fascicles admixed with mature adipocytes and myxoid stroma. variable hyalinization and hydropic degeneration is also noted. The adipocytes were mature and without evidence of lipoblasts, mitosis, necrosis or angiomatosis. Sections from other part of uterus, cervix fallopian tube and ovary were unremarkable.

DISCUSSION

Uterine lipomatous tumors are divided into 3 groups: pure lipomas (composed of mature adipose tissue), lipoleiomyomas (composed of a mixture of smooth muscle cells and mature adipose tissue) and malignant liposarcomas³.

The pathogenesis of lipoleiomyoma is unknown. Various hypothesis have been proposed for its origin such as Lipomatous metaplasia or pluripotent mesenchymal cells².

Lipoleiomyoma are uncertain due to its low incidence and is most common in perimenopausal and menopausal women between 50 and 70 years of age⁴. Typical leiomyomas tend to occur predominantly in women of reproductive age group where as lipoleiomyoma are very slow growing, mostly asymptomatic, and continue to grow after menopause⁵.

Patients with uterine lipoleiomyomas usually have associated metabolic disorders, such as diabetes mellitus, dyslipidemia, or hypothyroidism. These metabolic disorders, together with estrogen deficiency occurring in the peri- or menopausal period, seem to promote abnormal intracellular storage of lipids in adipocytes within the tumor. However, the reason for this association is still unknown^{6,7}.

On imaging a well-defined heterogeneous lesion containing

hyperechoic areas due to adipose tissue is seen. It sometimes resemble both a typical leiomyoma and a mature ovarian teratoma, depending on its location⁸.

On microscopy they are composed of adipocytes, hyperplastic smooth muscle cells and fibrous tissue. The combination of mature adipocytes and smooth muscle cells is necessary to correctly assign this condition³. Among lipoleiomyomas, the distribution of the adipose component is highly variable and ranges from uniform distribution within the tumor to focal concentrations in small areas. The tumors lack lipoblasts, adipocyte atypia or smooth muscle cells and necrosis. Therefore, there is no specific percentage of mature adipocytes to confirm the diagnosis.

The differential diagnosis of uterine lipoleiomyomas includes benign lipoma, mature ovarian teratoma, degenerated leiomyomas.

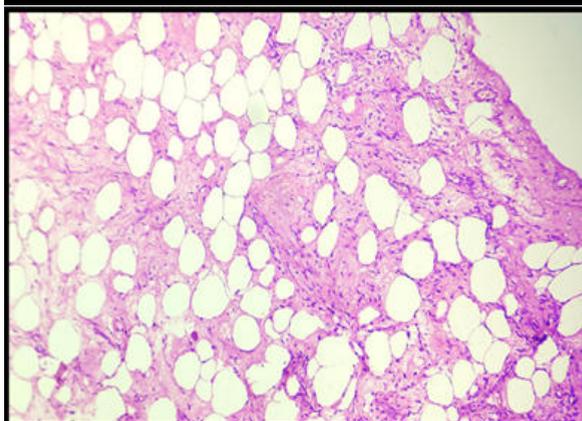
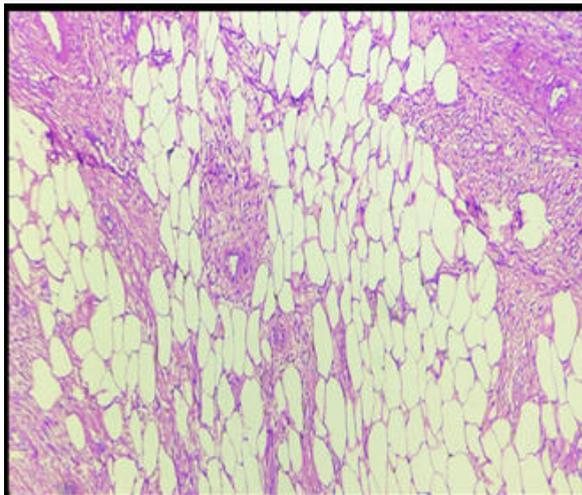
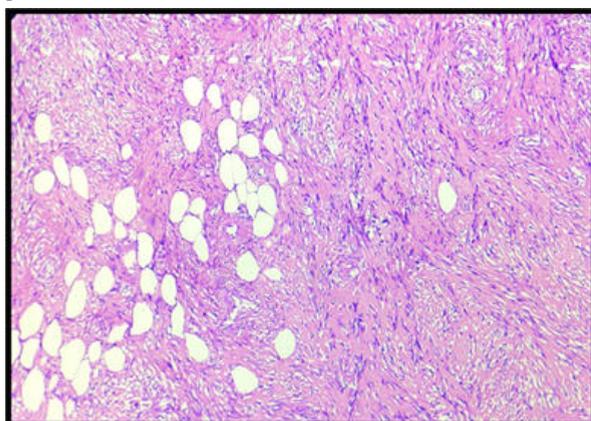
Surgery is only indicated in larger lesions that produce compression to neighboring organs and/or menstrual alterations⁹. They have an excellent prognosis after hysterectomy. On follow-up there is no evidence of recurrence and are not associated with mortality. However, there are reports of lipoleiomyosarcomas arising from uterine lipoleiomyomas and cases of intravenous lipoleiomyomatosis, so patients should undergo frequent clinical and pathologic evaluations to detect any coexisting gynecologic neoplasms.

CONCLUSION-

Uterine lipoleiomyoma are rare neoplasm and usually asymptomatic, so diagnosis can be difficult. The definitive diagnosis is based on histomorphological findings that show the presence of mature adipose tissue and smooth muscle cells in different proportions without cellular atypia. It is important to know this entity to prevent misdiagnosis.



Gross image showing uterus with cervix
Cut surface showing showing a well circumscribed mass with yellowish



a) Photomicrograph showing both interlacing fascicles of smooth muscle cells admixed with mature adipocytes
b) Sheets of mature adipocytes along with smooth muscle cells at scanner view
c) High power view of predominantly adipocytic area

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